

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**

(12) **UK Patent Application** (19) **GB** (11) **2 270 332** (13) **A**

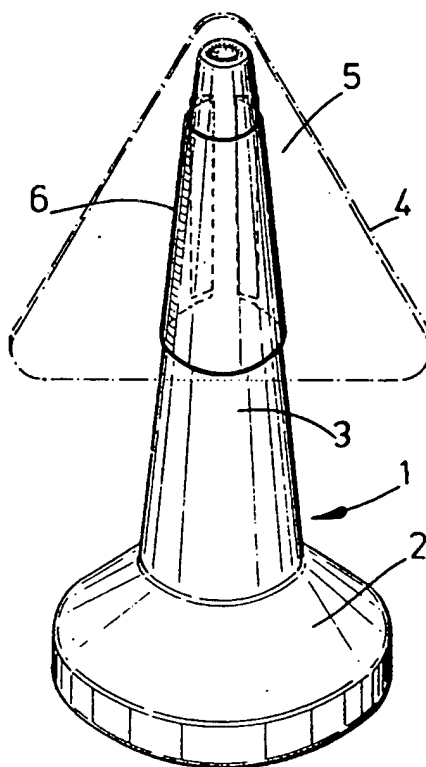
(43) Date of A Publication 09.03.1994

(21) Application No 9218751.7

(22) Date of Filing 04.09.1992

(71) Applicant(s)
John Edward Doel
16 Dorset Road, Atherton, Manchester, M29 9PP,
United Kingdom(72) Inventor(s)
John Edward Doel(74) Agent and/or Address for Service
Marks & Clerk
Suite 301, Sunlight House, Quay Street,
MANCHESTER, M3 3JY, United Kingdom(51) INT CL⁵
E01F 9/01, B60Q 7/00(52) UK CL (Edition M)
E1G GLJ G702 G708(56) Documents Cited
GB 2213854 A GB 2182701 A GB 1574005 A(58) Field of Search
UK CL (Edition L) E1G GLJ
INT CL⁵ B60Q, E01F(54) **Portable sign having flexible sleeve for attachment to a traffic cone**

(57) A portable sign comprises a shaped panel 4 which has information-conveying markings on a front face thereof. Fixed to a rear face of the panel 4 is a flexible material sleeve 6 with a tapered bore which is engageable by a free-standing road cone 1 for mounting the panel 4 above ground level. The sleeve may be formed from a single trapezoidal sheet of a durable material such as pre-coated nylon.

FIG. 1

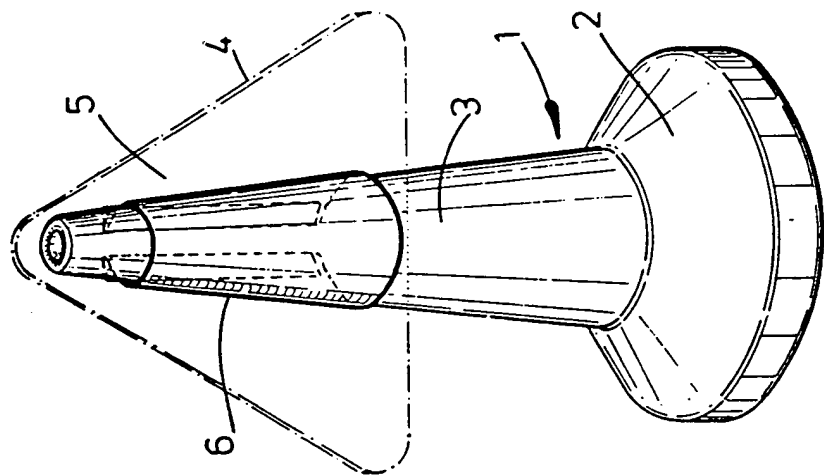


FIG. 1

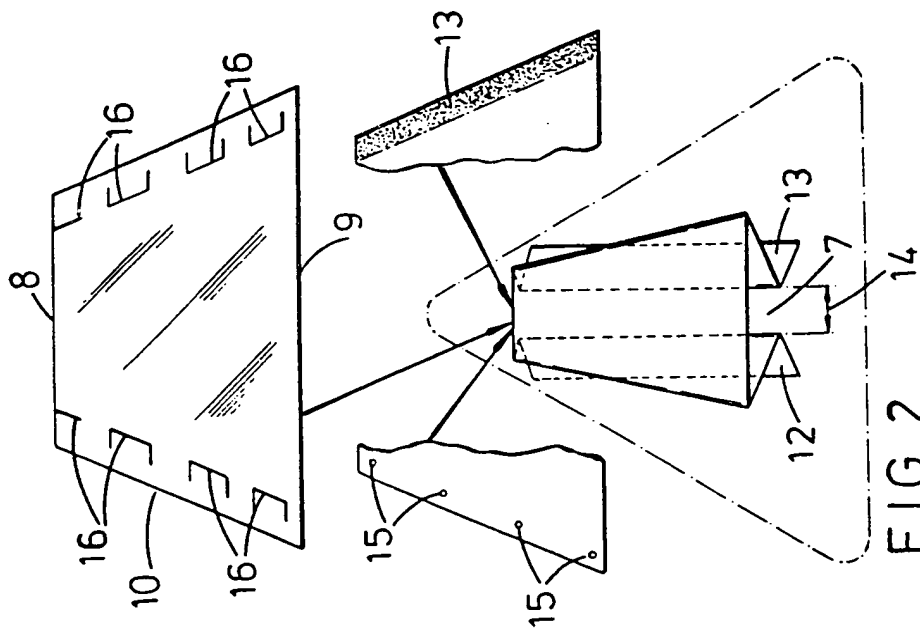


FIG. 2

2270332

1

A PORTABLE SIGN

This invention relates to a portable sign, particularly but not exclusively a road traffic sign.

It is well known to provide portable signs with collapsible metal stands but such signs are expensive to manufacture.

It is an objection of the present invention to provide a portable sign of cheap construction.

According to the present invention there is provided a portable sign comprising a shaped panel with information-conveying markings on a front face thereof and a rear face to which is fixed a flexible material sleeve with a tapered bore engageable by a free-standing road cone for mounting the panel above ground level.

Preferably, the sleeve is made from a flat piece of material of trapezoidal shape having parallel upper and lower edges interconnected by upwardly convergent side edges, the material piece being fixed to the rear panel face by side edge portions arranged in closely spaced parallel relationship so as to form said sleeve therebetween.

The side edge portions may be fixed to the rear panel face by means of adhesive and the sleeve material may be pvc-coated nylon.

In accordance with a further aspect of the invention there is provided a sign assembly comprising a portable sign as hereinbefore defined in combination with a free-standing road cone to which the sign is fitted by engagement of the road cone in the tapered bore of the flexible material sleeve of the sign.

The invention will now be further described by way of example only with reference to the accompanying drawings, in which:-

Fig. 1 is a diagrammatic side view of one embodiment of sign assembly in accordance with the invention, and

Fig. 2 shows the portable sign of Fig. 1 removed from the base with insets showing alternative designs.

Referring now to Fig. 1, a portable sign assembly comprises a standard road cone 1 with a base 2 and a conical body 3. A triangular panel 4 carries conventional markings on its front face (not shown) conveying information about road hazards, parking restrictions etc. Fixed to a rear face 5 of the panel 4 is a sleeve 6 made of durable,

flexible material, e.g. pvc-coated nylon. The sleeve 6 can fold flat against the panel rear face 5 to facilitate transport or storage of the panels 4. In the position of use illustrated in Fig. 1, the sleeve 6 engages the conical surface of the cone body 3. For this purpose the sleeve 6 has an upwardly tapered bore 7 which is in frictional engagement over its full extent with the cone body 3.

The sleeve 6 is made from a flexible piece of material of trapezoidal shape as shown in the upper inset of Fig. 2. The piece of material has upper and lower edges 8, 9 interconnected by upwardly tapering side edges 10, 11. Side edge portions 12, 13 are adhesively connected to the rear panel face 5 in closely spaced parallel relationship so as to leave a narrow gap 14 between the edge portions 12, 13. The edges of the gap 14, i.e. the inner edges of the edge portions 12, 13 thus extend parallel to each other which has the effect of preventing rotation of the sleeve 6 on the cone body 3 as a result of twisting of the panel 4.

The right hand inset of Fig. 2 shows the side edge portion 13 shaded to indicate an adhesive connection with the panel 4. Any suitable adhesive may be used but since the sleeve 6 is pvc coated and the panel 4 is preferably also made of pvc material, the adhesive is preferably pvc-based.

An alternative way of fixing the sleeve 6 to the panel 4 is by rivets 15 as shown in the left hand insert of Fig. 2.

The upper insert of Fig. 2 shows optional cuts 16 in the side edge portions of the sleeve material. In the unattached state of the sleeve, these cuts define flaps which are then adhesively connected to the rear face 5 of the panel 4 with the remainder of the edge portions 12, 13. The effect of the cuts is to relieve tension on the edge portions 12, 13 which could result in peeling away of the edge portions and consequent detachment of the sleeve 6 from the panel 4.

CLAIMS:

1. A portable sign comprising a shaped panel with information-conveying markings on a front face thereof and a rear face to which is fixed a flexible material sleeve with a tapered bore engageable by a free-standing road cone for mounting the panel above ground level.
2. A sign as claimed in claim 1, wherein the sleeve is made from a flat piece of material of trapezoidal shape having parallel upper and lower edges interconnected by upwardly convergent side edges, the material piece being fixed to the rear panel face by side edge portions arranged in closely spaced parallel relationship so as to form said sleeve therebetween.
3. A sign as claimed in claim 2, wherein the side edge portions are fixed to the rear panel face by means of adhesive.
4. A sign as claimed in claim 2 or 3, wherein the sleeve material is pvc-coated nylon.
5. A sign assembly comprising a portable sign as claimed in any one of the preceding claims and a free-standing road cone to which the sign is fitted by engagement of the conical surface of the road cone in the tapered bore of the flexible material sleeve of the sign.

- 4 -

Patents Act 1977
Examiner's report to the Comptroller under Section 17
(The Search report)

Application number
GB 9218751.7

Relevant Technical Fields

- (i) UK Cl (Ed.L) E1G (GLJ)
(ii) Int Cl (Ed.5) E01F; B60Q

Search Examiner
S J CHURCH

Date of completion of Search
14 OCTOBER 1993

Databases (see below)

(i) UK Patent Office collections of GB, EP, WO and US patent specifications.

Documents considered relevant following a search in respect of Claims :-
1-5

(ii)

Categories of documents

X: Document indicating lack of novelty or of inventive step.

P: Document published on or after the declared priority date but before the filing date of the present application.

Y: Document indicating lack of inventive step if combined with one or more other documents of the same category.

E: Patent document published on or after, but with priority date earlier than, the filing date of the present application.

A: Document indicating technological background and/or state of the art.

&: Member of the same patent family; corresponding document.

Category	Identity of document and relevant passages		Relevant to claim(s)
X	GB 2213854 A	(MELBA) whole of document	1 & 5
X	GB 2182701 A	(SPACESAVER) whole of document	1 & 5
X	GB 1574005 A	(SWINTEX) whole of document	1 & 5

Databases: The UK Patent Office database comprises classified collections of GB, EP, WO and US patent specifications as outlined periodically in the Official Journal (Patents). The on-line databases considered for search are also listed periodically in the Official Journal (Patents).